

3685 (C) COM

BEST AVAILABLE COPY

- 50 -

CLAIMS

1. A hair treatment composition comprising an aqueous dispersion of water insoluble composite particles, the particles comprising:
- i) a clay with a net surface charge,
 - ii) a charged organic molecule comprising at least 6 carbon atoms, and
 - iii) a water insoluble hair benefit agent which is immiscible with the charged organic molecule, and which is a silicone polymer, a mixture of silicones or a finely divided solid,
- wherein the charge on the charged organic molecule is opposite to the net surface charge of the clay, the hair treatment composition further comprising one or more suitable hair treatment ingredients in a compatible aqueous carrier, and wherein the weight of composite particles in the composition is from 0.05 to 10 per cent by weight of the total weight of the composition.
2. A composition as claimed in claim 1, wherein the weight ratio of the charged organic molecule to the clay is from 0.05:1 to 20:1.
3. A composition as claimed in claim 1 or claim 2, wherein the volume based median particle diameter of the composite particles is from 5 to 450 microns.
4. A composition as claimed in any preceding claim, wherein the clay has a net negative surface charge and the charged organic molecule has a positive charge.

30

ART 31 AMDT

AMENDED SHEET

3685 (C) COM

BEST AVAILABLE COPY

- 51 -

5. A composition as claimed in claim 4, wherein the clay is a synthetic hectorite.

6. A composition as claimed in claim 4 or claim 5, wherein the charged organic molecule is the cation of an alkyl trimethyl ammonium chloride, wherein the alkyl chain comprises from 12 to 22 carbon atoms.

7. A composition as claimed in claim 4 or claim 5, wherein the charged organic molecule is a cationic polymer.

8. A composition as claimed in any preceding claim, wherein the weight ratio of the clay to the water insoluble hair benefit agent is from 0.05:1 to 1:1.

9. A composition as claimed in any preceding claim, wherein the water insoluble hair benefit agent is a silicone polymer.

10. A composition as claimed in claim 9, wherein the silicone polymer is a silicone elastomer.

~~11. A composition as claimed in any preceding claim, wherein the weight of water insoluble composite particles, based on the total composition, is from 0.01 to 20 percent by weight of~~

~~the total composition~~ (deleted)

11 ~~12~~. A composition as claimed in any preceding claim, which is a rinse off hair conditioner.

ART 34 AMDT

AMENDED SHEET

BEST AVAILABLE COPY

- 52 -

12

~~13~~. A process for the preparation of an aqueous dispersion of composite particles as defined in any one of claims 1 to

~~11~~, comprising the steps of:

- 10 (i) dispersing the water insoluble hair benefit agent and the clay in water to form a dispersed premixture of clay and hair benefit agent,
- (ii) combining the premixture with the charged organic molecule.

10 ~~14~~. A process for the preparation of an aqueous dispersion of composite particles as defined in any one of claims 1 to

~~13~~. comprising the steps of:

- 10 (i) dispersing the water insoluble hair benefit agent and the charged organic molecule in water to form a dispersed premixture of charged organic molecule and hair benefit agent,
- (ii) combining the premixture with the clay.

14 ~~15~~. A process for making a hair treatment composition according to any of claims 1 to ~~11~~ comprising the steps of:

- (i) preparing an aqueous dispersion of composite particles by the process of claim ~~13~~ or claim ~~14~~,
and

- (ii) combining the aqueous dispersion of composite particles with the remaining suitable hair treatment ingredients in a compatible aqueous carrier without first drying the aqueous dispersion of composite particles.

15

30 ~~16~~. A method for treating hair and/or scalp, which comprises applying to the hair and/or scalp a composition as

ART 34 AMDT

AMENDED SHEET

13685 (C) COM

BEST AVAILABLE COPY

- 53 -

11

claimed in any one of claims 1 to ~~12~~ followed by rinsing with water.

16. ~~17~~. A method for depositing hair benefit agents onto hair and/or scalp, which comprises applying to the hair and/or scalp a composition as claimed in any one of claims 1 to ~~12~~ 11 followed by rinsing with water.

17. ~~18~~. Use of a hair treatment composition as claimed in any one of claims 1 to ~~12~~ to deposit hair benefit agents onto hair and/or scalp. 11

ART 34 AMDT

AMENDED SHEET